

(ii) 6 liters/min per square meter of the horizontal sectional area of the single tank having the largest such area; or

(iii) 3 liters/min per square meter of the area protected by the largest monitor, such area being entirely forward of the monitor, but not less than 1,250 liters/min.

(2) For polar solvent products (e.g. alcohols, ketones, etc.) the water rate shall be determined for each vessel. The rate will depend upon the vessel design, products to be carried and foam system to be used.

(c) *Supply of foam-producing material.* Each deck foam system must have a supply of foam-producing material sufficient to operate the system at its designed rate of foam production for the following periods:

(1) For installations contracted for on or after January 1, 1970, 15 minutes without recharging, except as required in paragraph (c)(2) of this section.

(2) For installations on ships that have a keel laying date on or after January 1, 1975, 20 minutes without recharging.

(d) *Separate supply of foam-producing material.* Where the same foam-producing material may be used for this system as well as a fixed foam system, separate supplies need not be provided for each space protected. The total available supply shall be at least sufficient for the space requiring the greatest amount.

(e) *Water supply.* Suitable pumps shall be provided capable of producing the required water rate. The fire pumps required by subpart 34.10 may be used for this purpose; however, the operation of the deck foam system shall not interfere with the simultaneous use of the fire main system.

[CGFR 65-50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 69-72, 34 FR 17481, Oct. 29, 1969; CGD 74-127, 41 FR 3846, Jan. 26, 1976; CGD 95-028, 62 FR 51199, Sept. 30, 1997]

§ 34.20-10 Controls—T/ALL.

(a) The foam agent, its container, measuring devices, and other items peculiar to this system shall be of an approved type.

(b) The foam agent container and the main controls for operating the system shall be located in a protected space

not likely to be made inaccessible in the event of a fire in any portion of the cargo area.

(c) Complete, but simple instructions for the operation of the system shall be located in a conspicuous place at or near the controls.

(d) All valves shall be marked as required by § 35.40-17.

(e) The deck foam system on each tankship that has a keel laying date on or after January 1, 1975, must be capable of being actuated, including introduction of foam to the foam main, within three minutes of notification of a fire.

[CGFR 65-50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 74-127, 41 FR 3846, Jan. 26, 1976]

§ 34.20-15 Piping—T/ALL.

(a) All piping, valves, and fittings shall meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(b) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.

(c) The piping and outlet arrangement shall allow the required rate of applications as contained in § 34.20-5(b), to any portion of the open deck of the cargo area through the use of the mounted and hand-held appliances that are provided. At least 50 percent of the required rate of application shall be from the mounted appliances. One or more hose outlets for hand-held appliances shall be provided at each foam station. For enclosed spaces, application of at least 1.6 gallons per minute water rate for each 10 square feet of the enclosed area for 5 minutes is acceptable. For the purpose of this paragraph, all piping is assumed to be damaged in way of the fire and an adequate number of valves shall be fitted to prevent loss of foam by closing valves to damaged piping.

(d) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.

(e) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture.

(f) Piping shall not be used for any other purpose than firefighting, drills, and testing.

(g) Tankships of 100,000 or more DWT (metric) and combination carriers of 50,000 or more DWT (metric) that have a keel laying date on or after January 1, 1975, must have at least one foam station port and at least one foam station starboard that are separated from each other by a distance equal to at least one-half the beam of the vessel:

(1) At the housefront or aft of the cargo area in a location that is accessible to the crew for fighting a cargo and a pumproom fire; and

(2) If the tankship has a forward accommodations house, at the after boundary of that house.

[CGFR 65-50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 72-138, 39 FR 7790, Feb. 28, 1974; CGD 74-127, 41 FR 3846, Jan. 26, 1976]

§ 34.20-20 Discharge outlets—T/ALL.

(a) Discharge outlets shall be of an approved type.

(b) At least one mounted foam appliance shall be provided for each station that is required in § 34.20-15(c).

(c) The number of hand-held appliances provided shall be at least equal to the number of hose outlets at the two foam stations having the most hose outlets. Hand-held appliances shall be stowed in a well marked, readily accessible position that cannot be isolated by a fire involving the cargo tanks.

[CGFR 65-50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 72-138, 39 FR 7790, Feb. 28, 1974]

§ 34.20-25 Foam monitor capacity—T/ALL.

The capacity of each foam monitor on ships that have a keel laying date on or after January 1, 1975, must be at least 3 liters per minute per square meter (.073 gallons per minute per square foot) of cargo area protected by that monitor.

[CGD 74-127, 41 FR 3846, Jan. 26, 1976]

§ 34.20-90 Installations contracted for prior to January 1, 1970—T/ALL.

(a) Installations contracted for prior to January 1, 1970, shall meet the following requirements:

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) For installations contracted for prior to November 19, 1952, see § 34.17-90(a)(5).

(3) Installations contracted for on or after November 4, 1957, but prior to January 1, 1970, shall meet the requirements of §§ 34.20-5 through 34.20-20 insofar as is reasonable and practicable.

[CGFR 65-50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 69-72, 34 FR 17481, Oct. 29, 1969]

Subpart 34.25—Water Spray Extinguishing Systems, Details

§ 34.25-1 Application—T/ALL.

(a) Where a water spray extinguishing system is installed, the provisions of this subpart, with the exception of § 34.25-90, shall apply to all installations contracted for on or after January 1, 1964. Installations contracted for prior to January 1, 1964, shall meet the requirements of § 34.50-90.

§ 34.25-5 Capacity and arrangement—T/ALL.

(a) The capacity and arrangement shall be such as to effectively blanket the entire area of the space protected. The rate of discharge and the arrangement of piping and spray nozzles shall be such as to give a uniform distribution over the entire area protected.

(b) The spacing of the spray nozzles shall be on the basis of the spray pattern provided by the lowest pressure at any spray nozzle in the system. In no instance shall a system be designed for any spray nozzle to be operated at a pressure less than that for which it was approved. The maximum permissible height of the spray nozzle above the protected area shall not exceed that specified in its approval. Whenever there are obstructions to coverage by the spray patterns, additional spray nozzles shall be installed to provide full coverage.